

Abstract

An apparatus and method for allocating and positioning back-up pins for supporting a substrate are provided. The apparatus includes a substrate guide rail for guiding a circuit board to a predetermined position; a plurality of magnetic back-up pins for supporting the circuit board; a back-up pin plate for placing the back-up pins thereon; a back-up pin stand disposed near the back-up pin plate and for holding the back-up pins; a camera for photographing an image of a surface of the circuit board; a display means for displaying a virtual or composed image of the entire circuit board scanned by the camera and a real-time image of a portion of the circuit board for aiding a user to allocate the adequate support locations of the circuit board; and a transfer means for transferring the back-up pins onto the allocated locations on the back-up pin plate.